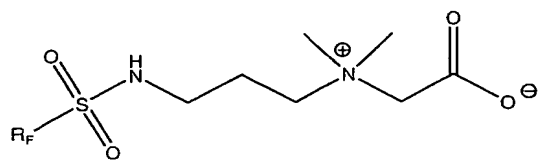


CLAIMS

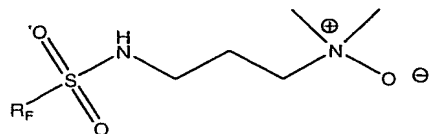
The invention claimed is:

1. A surfactant composition comprising R_F - Q_s , wherein:
 R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;
5 Q_s has a greater affinity for a second part of the system than R_F ; and
 R_F comprises at least two $-CF_3$ groups and at least two hydrogens.
2. The surfactant composition of claim 1 wherein R_F is hydrophobic relative to Q_s .
3. The surfactant composition of claim 1 wherein Q_s is hydrophilic relative to R_F .
- 10 4. The surfactant composition of claim 1 wherein R_F is hydrophobic and Q_s is hydrophilic.
5. The surfactant composition of claim 1 wherein R_F comprises at least one $-CH_2-$ group.
- 15 6. The surfactant composition of claim 1 wherein R_F comprises at least one cyclic group.
7. The surfactant composition of claim 1 wherein R_F comprises at least one cyclic group.
8. The surfactant composition of claim 7 wherein the cyclic group comprises an aromatic group.
- 20 9. The surfactant composition of claim 1 wherein R_F comprises at least one $(CF_3)_2CF-$ group.
10. The surfactant composition of claim 1 wherein R_F comprises at least three $-CF_3$ groups.
- 25 11. The surfactant composition of claim 1 wherein R_F comprises at least two $(CF_3)_2CF-$ groups.
12. The surfactant composition of claim 1 wherein R_F comprises at least four carbons and one of the four carbons comprises a $-CH_2-$ group.

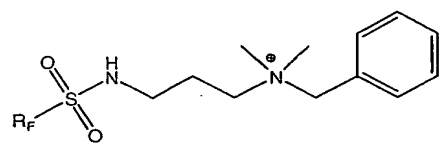
13. The surfactant composition of claim 1 wherein R_F-Q_s is



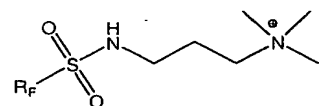
14. The surfactant composition of claim 1 wherein R_F-Q_s is



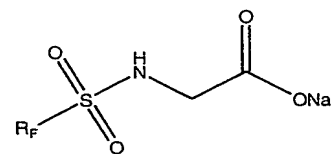
5 15. The surfactant composition of claim 1 wherein R_F-Q_s is



16. The surfactant composition of claim 1 wherein R_F-Q_s is

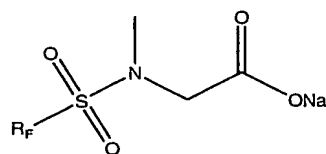


17. The surfactant composition of claim 1 wherein R_F-Q_s is

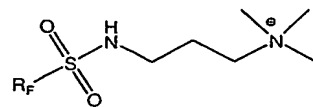


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18. The surfactant composition of claim 1 wherein R_F-Q_s is

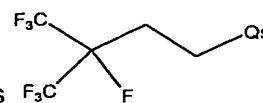


19. The surfactant composition of claim 1 wherein R_F-Q_s is

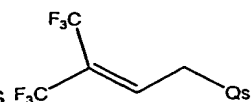


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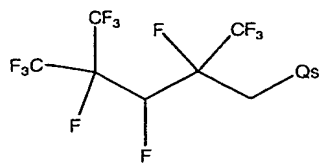
20. The surfactant composition of claim 1 wherein R_F-Q_s is



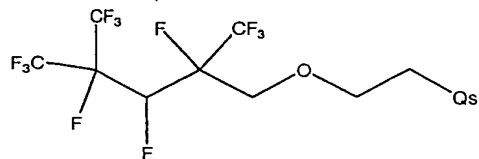
21. The surfactant composition of claim 1 wherein R_F-Q_s is



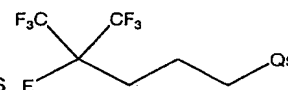
22. The surfactant composition of claim 1 wherein R_F-Q_s is



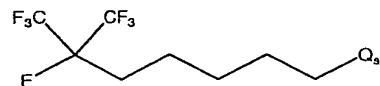
23. The surfactant composition of claim 1 wherein R_F-Q_s is



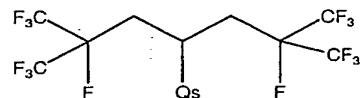
5 24. The surfactant composition of claim 1 wherein R_F-Q_s is



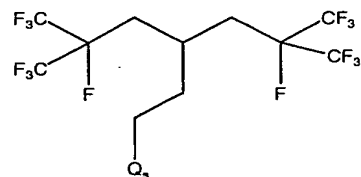
25. The surfactant composition of claim 1 wherein R_F-Q_s is



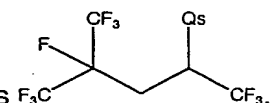
26. The surfactant composition of claim 1 wherein R_F-Q_s is



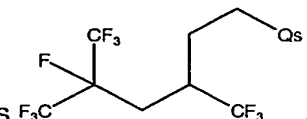
10 27. The surfactant composition of claim 1 wherein R_F-Q_s is



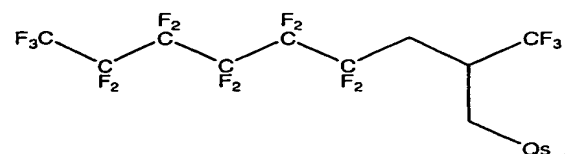
28. The surfactant composition of claim 1 wherein R_F-Q_s is



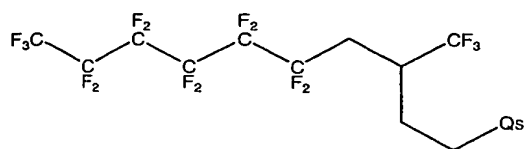
29. The surfactant composition of claim 1 wherein R_F-Q_s is



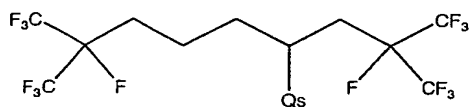
30. The surfactant composition of claim 1 wherein R_F-Q_s is



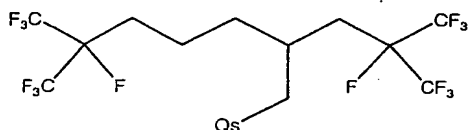
31. The surfactant composition of claim 1 wherein R_F-Q_s is



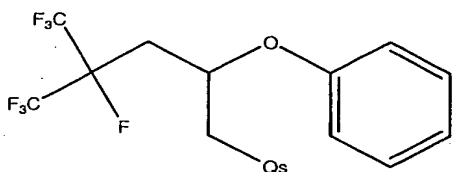
32. The surfactant composition of claim 1 wherein R_F-Q_s is



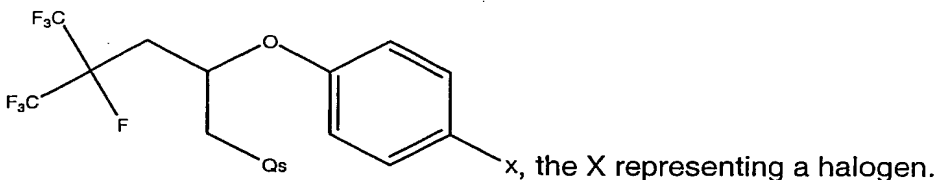
5 33. The surfactant composition of claim 1 wherein R_F-Q_s is



34. The surfactant composition of claim 1 wherein R_F-Q_s is



35. The surfactant composition of claim 1 wherein R_F-Q_s is



36. A detergent comprising a surfactant composition, the surfactant composition comprising R_F-Q_s , wherein:

R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;

Q_s has a greater affinity for a second part of the system than R_F ; and

15 R_F comprises at least two $-CF_3$ groups and at least two hydrogens.

37. An emulsifier comprising a surfactant composition, the surfactant composition comprising R_F-Q_s , wherein:

R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;

Q_s has a greater affinity for a second part of the system than R_F ; and

20 R_F comprises at least two $-CF_3$ groups and at least two hydrogens.

38. A paint comprising a surfactant composition, the surfactant composition comprising R_F - Q_s , wherein:

R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;

Q_s has a greater affinity for a second part of the system than R_F ; and

R_F comprises at least two $-CF_3$ groups and at least two hydrogens.

39. An adhesive comprising a surfactant composition, the surfactant composition comprising R_F - Q_s , wherein:

R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;

Q_s has a greater affinity for a second part of the system than R_F ; and

R_F comprises at least two $-CF_3$ groups and at least two hydrogens.

40. An ink comprising a surfactant composition, the surfactant composition comprising R_F - Q_s , wherein:

R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;

Q_s has a greater affinity for a second part of the system than R_F ; and

R_F comprises at least two $-CF_3$ groups and at least two hydrogens.

41. A wetting agent comprising a surfactant composition, the surfactant composition comprising R_F - Q_s , wherein:

R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;

Q_s has a greater affinity for a second part of the system than R_F ; and

R_F comprises at least two $-CF_3$ groups and at least two hydrogens.

42. A foamer comprising a surfactant composition, the surfactant composition comprising R_F - Q_s , wherein:

R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;

Q_s has a greater affinity for a second part of the system than R_F ; and

R_F comprises at least two $-CF_3$ groups and at least two hydrogens.

43. A defoamer comprising a surfactant composition, the surfactant comprising R_F - Q_s , wherein:

R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;

Q_s has a greater affinity for a second part of the system than R_F ; and

R_F comprises at least two $-CF_3$ groups and at least two hydrogens.

44. A production process comprising:

providing a first compound, the first compound comprising at least two $-\text{CF}_3$ groups and two hydrogens, a portion of the first compound representing R_F of an $\text{R}_\text{F}\text{-Q}_\text{s}$ surfactant, wherein:

R_F has a greater affinity for a first part of a system having at least two parts than Q_s ;

Q_s has a greater affinity for a second part of the system than R_F ; and

R_F comprises the two $-\text{CF}_3$ groups and the two hydrogens; and

adding Q_s to R_F to form the $\text{R}_\text{F}\text{-Q}_\text{s}$ surfactant.

45. The production process of claim 44 wherein R_F is hydrophobic relative to Q_s .

46. The production process of claim 44 wherein Q_s is hydrophilic relative to R_F .

47. The production process of claim 44 wherein R_F is hydrophobic and Q_s is hydrophilic

48. The production process of claim 44 wherein R_F comprises at least one $-\text{CH}_2-$ group.

49. The production process of claim 44 wherein R_F comprises at least one cyclic group.

50. The production process of claim 49 wherein the cyclic group comprises an aromatic group.

51. The production process of claim 44 wherein R_F comprises at least one $(\text{CF}_3)_2\text{CF}-$ group.

52. The production process of claim 44 wherein R_F comprises at least three $-\text{CF}_3$ groups.

53. The production process of claim 44 wherein R_F comprises at least two $(\text{CF}_3)_2\text{CF}-$ groups.

54. The production process of claim 44 wherein R_F comprises at least four carbons and one of the four carbons comprises a $-\text{CH}_2-$ group.

55. A process for altering a surface tension of a part of a system having at least two parts, comprising adding a surfactant composition comprising R_F - Q_s to a portion of the system, wherein:

R_F has a greater affinity for one part of the system than Q_s ;

5 Q_s has a greater affinity for another part of the system than R_F ; and

R_F comprises at least two $-CF_3$ groups and at least two hydrogens.

56. The process of claim 55 wherein R_F is hydrophobic relative to Q_s .

57. The process of claim 55 wherein Q_s is hydrophilic relative to R_F .

58. The process of claim 55 wherein R_F is hydrophobic and Q_s is hydrophilic.

10 59. The process of claim 55 wherein R_F comprises at least one $-CH_2-$ group.

60. The process of claim 55 wherein R_F comprises at least one cyclic group.

61. The process of claim 60 wherein the cyclic group comprises an aromatic group.

62. The process of claim 55 wherein R_F comprises at least one $(CF_3)_2CF-$ group.

15 63. The process of claim 55 wherein R_F comprises at least three $-CF_3$ groups.

64. The process of claim 55 wherein R_F comprises at least two $(CF_3)_2CF-$ groups.